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EXAMINER	
AMINI, JAVID A	

ART UNIT	PAPER NUMBER
2672	11

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/537,849	SCOTT ET AL.	
	Examiner	Art Unit	
	Javid A Amini	2672	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-20 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-20 is/are rejected.

7)☒ Claim(s) 1-20 is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

Response to Amendment

Applicant's arguments with respect to claims 1 and 9 have been considered but are moot in view of the new ground(s) of rejection.

The amendment filed on August 06, 2003 has been considered, but is ineffective to overcome the DeLorme et al. reference.

- Applicant on page 8 of remarks, line 8, argues that the Examiner admits the DeLorme fails to teach or suggest or discloses all of the claim limitation. Examiner's reply: Examiner is unable to find the above statement on the official action dated April 24, 2003, (Examiner assumes that Applicant meant April 30, 2003).
- Applicant on page 9, lines 3-6, argues: that the Examiner does not argue and DeLorme does not teach the claim limitation. Examiner's reply: Claim 1 language analyzed line by line, to show or illustrate clearly the limitations of claim 1 are taught by DeLorme:

  Claim 1:

  DeLorme in Figs. 3-6, 14B, 14D, 14F and 15 illustrates "A method for georeferencing a raster map image, comprising":

  DeLorme in Fig. 6 clearly illustrates "displaying a raster map and a georeferenced map"; also in Fig. 14E illustrates that an image can be scanned to be able to display (raster image) it on a computer.

  DeLorme in Fig. 2 illustrates (annotating point see points 20 and 21) "annotating a point on the raster map";

DeLorme in Fig. 1 illustrates the step of "identifying image coordinates associated with the annotated point on the raster map" clearly;

DeLorme in Fig. 1 illustrates the step of "identifying geographic coordinates associated with the annotated point on the georeferenced map that correspond to the annotated point on the raster map" clearly;

This step is just repeating procedures of above steps: "Repeating annotating a point on the raster map, identifying image coordinates associated with the annotated point on the raster map, annotating a point on the georeferenced map, and identifying geographic coordinates associated with the annotated point on the georeferenced map at least a second time";

DeLorme on (col. 56, lines 30-44) teaches the step of "determining a mathematical relationship between the image coordinates".

Therefore, DeLorme teaches each and every limitation of claims 1 and 9. For the above reasons, claims 2-8 and 10-20 are rejected based on their dependency from claims 1 and 9.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1 and 9 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The implementation or construction of a term "annotating a point" is not defined in the specification.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim1 1-20 rejected under 35 U.S.C. 102(b) as being anticipated by Delorme et al. (DeLorme).

1. As per claim 1, "a method for georeferencing a raster map image, comprising: displaying a raster map and a georeferenced map; annotating a point on the raster map; identifying image coordinates associated with the annotated point on the raster map; annotated a point on the georeferenced map; identifying geographic coordinates associated with the annotated point on

the georeferenced map that correspond to the annotated point on the raster map; repeating annotating a point on the raster map, identifying image coordinates associated with the annotated point on the raster map, annotating a point on the georeferenced map, and identifying geographic coordinates associated with the annotated point on the georeferenced map at least a second time; determining a mathematical relationship between the image coordinates." Delorme discloses in Fig. 6, (first and second maps) a view of the CAMLS system with desktop PC or workstation programmed for printing strip maps or "trip tickets" showing proposed routes of travel from a point of origin to a destination. Delorme discloses in (col. 42, lines 34-51) conversion routines for raster data, symbols & annotations an array of conversion routines for conversion of raster data consisting of mapping graphics and related text, derived from input devices such as scanned in paper maps, message pads, digitizing tables, graphics and CAD programs, fax and wireless data transmissions into standard CAMLS data structures. The step of determining a mathematical relationship between the image coordinates and the geographic coordinates is inherent because a user marks the origin and the destination on the map.

2. As per claim 2, "the method of claim 1, further comprising: using the mathematical relationship to determine the geographic coordinates of at least one feature on the raster map", the step is inherent because Delorme discloses in (col. 30, lines 37-55) Known programming techniques, which involve a process of matching the particulars of identified data structures with pre-defined criteria, are sufficient to enable CAMLS software to perform the reading and recognition tasks.

3. As per claim 3, "the method of claim 1, further comprising: storing the mathematical relationship with the raster map", Delorme discloses in (col. 1, lines 59-63) he geographical

coordinate system located objects include user location, geographical destinations, and other selected geographical objects, from a set of databases stored in PDA/PC/EC memory devices or accessible through wired and wireless data communications links.

4. As per claim 4, "the method of claim 1, further comprising: manipulating the raster map to display a location on the raster map; and updating the display of the georeferenced map to display a location identical to the location displayed on the raster map", Delorme discloses in Fig. 6, a view of the CAMLS system with desktop PC or workstation programmed for printing strip maps or "trip tickets" showing proposed routes of travel from a point of origin to a destination.

5. As per claim 5, "the geographic coordinates are latitude and longitude", the step is inherent because two objects are in correlation, therefore, Delorme discloses in (col. 2, lines 25-35) The CAMLS system provides "intelligent" printed maps by direct computer output of computed mapping and travel location data on grid quadrangles for correlation with mapped surface features on the corresponding printed maps. This can be accomplished by human senses, e.g. visually and intuitively between human readable forms of the map without the necessity of mentally or quantitatively determining latitude and longitude and without requiring any mathematical calculations by the user.

6. As per claim 6, "the raster map and the georeferenced map are displayed on the same computer display", the step is inherent because Delorme illustrates in Fig. 6.

7. As per claim 7, "the corresponding points are marked by a user after visually determining geographically corresponding points", Delorme illustrates in Fig. 1, and the boundary edges of the graphics display window 18 are formed with "hash marks" or subdivision marks 22 which

further subdivide the selected grid quadrangle C3 on page 41. These hash marks or subdivision marks are also reproduced on the printed maps (not visible in Fig. 1) to further assist the user 12 in visually and intuitively determining his or her location with reference to the detailed mapping features depicted on the printed map.

8. As per claim 8, "the method of claim 1, wherein the mathematical relationship is represented by a set of general linear functions", Delorme' invention is involved a single dimension and also having a response (output) that is directly proportional to the input. These are considered as general linear function.

9. As per claim 9, "an apparatus for georeferencing a raster map image, comprising: means for displaying a raster map and a georeferenced map; mean for annotating a point on the raster map; mean for identifying image coordinates associated with the annotated point on the raster map; mean for annotated a point on the georeferenced map; mean for identifying geographic coordinates associated with the annotated point on the georeferenced map that correspond to the annotated point on the raster map; mean for repeating annotating a point on the raster map, identifying image coordinates associated with the annotated point on the raster map, annotating a point on the georeferenced map, and identifying geographic coordinates associated with the annotated point on the georeferenced map at least a second time; mean for determining a mathematical relationship between the image coordinates". Delorme discloses in Fig. 6, (first and second maps) a view of the CAMLS system with desktop PC or workstation programmed for printing strip maps or "trip tickets" showing proposed routes of travel from a point of origin to a destination. Delorme discloses in (col. 42, lines 34-51) conversion routines for raster data, symbols & annotations an array of conversion routines for conversion of raster data consisting of

mapping graphics and related text, derived from input devices such as scanned in paper maps, message pads, digitizing tables, graphics and CAD programs, fax and wireless data transmissions into standard CAMLS data structures.

10. As per claim 10, "the apparatus of claim 9, further comprising: means for using the mathematical relationship to determine the geographic coordinates of at least one feature on the raster map", the step is inherent because Delorme discloses in (col. 30, lines 37-55) Known programming techniques, which involve a process of matching the particulars of identified data structures with pre-defined criteria, are sufficient to enable CAMLS software to perform the reading and recognition tasks.

11. As per claim 11, "the system of claim 9, further comprising: means for storing the mathematical relationship with the raster map", Delorme discloses in (col. 1, lines 59-63) he geographical coordinate system located objects include user location, geographical destinations, and other selected geographical objects, from a set of databases stored in PDA/PC/EC memory devices or accessible through wired and wireless data communications links.

12. As per claim 12, "the apparatus of claim 9, further comprising: means for manipulating, the raster map to display a location on the raster map; and means for updating the display of the georeferenced map to display a location identical to the location displayed on the raster map", Delorme illustrates in Fig. 1, and the boundary edges of the graphics display window 18 are formed with "hash marks" or subdivision marks 22 which further subdivide the selected grid quadrangle C3 on page 41. These hash marks or subdivision marks are also reproduced on the printed maps (not visible in Fig. 1) to further assist the user 12 in visually and intuitively

determining his or her location with reference to the detailed mapping features depicted on the printed map.

13. As per claim 13, "the apparatus of claim 9, wherein the geographic coordinates are latitude and longitude", the step is inherent because two objects are in correlation, therefore, Delorme discloses in (col. 2, lines 25-35) The CAMLS system provides "intelligent" printed maps by direct computer output of computed mapping and travel location data on grid quadrangles for correlation with mapped surface features on the corresponding printed maps. This can be accomplished by human senses, e.g. visually and intuitively between human readable forms of the map without the necessity of mentally or quantitatively determining latitude and longitude and without requiring any mathematical calculations by the user.

14. As per claim 14, "the apparatus of claim 9, wherein the raster map and the georeferenced map are displayed on the same computer display", the step is inherent because Delorme illustrates in Fig. 6.

15. As per claim 15, "the apparatus of claim 9, wherein the corresponding points are marked by a user after visually determining geographically corresponding points", Delorme illustrates in Fig. 1, and the boundary edges of the graphics display window 18 are formed with "hash marks" or subdivision marks 22 which further subdivide the selected grid quadrangle C3 on page 41. These hash marks or subdivision marks are also reproduced on the printed maps (not visible in Fig. 1) to further assist the user 12 in visually and intuitively determining his or her location with reference to the detailed mapping features depicted on the printed map.

16. As per claim 16, "the apparatus of claim 9, wherein the mathematical relationship is represented by a set of general linear functions", Delorme' invention is involved a single

dimension and also having a response (output) that is directly proportional to the input. These are considered as general linear function.

17. Claim 17, "The method of claim 1 further comprising identifying image coordinates associated with at least one point on the raster map; identifying geographic coordinates of points on the georeferenced map that correspond to the point identified on the raster map; and revising the mathematical relationship", Delorme illustrates in Fig. 1, and the boundary edges of the graphics display window 18 are formed with "hash marks" or subdivision marks 22 which further subdivide the selected grid quadrangle C3 on page 41. These hash marks or subdivision marks are also reproduced on the printed maps (not visible in Fig. 1) to further assist the user 12 in visually and intuitively determining his or her location with reference to the detailed mapping features depicted on the printed map.

18. Claim 18, "The method of claim 17, wherein revising further comprises disregarding any points previously identified that are substantially inconsistent with the mathematical relationship", Delorme discloses in (col. 34, lines 21-23) many operations that prompt new grid display/output can be conveniently described in terms of naming the new grid then changing the display/output accordingly.

19. Claim 19, "The apparatus of claim 9 further comprising: means for identifying image coordinates associated with at least one point on the raster map; means for identifying geographic coordinates of points on the georeferenced map that correspond to the point identified on the raster map; and means for revising the mathematical relationship", Delorme discloses in Fig. 6, a view of the CAMLS system with desktop PC or workstation programmed for printing strip maps or "trip tickets" showing proposed routes of travel from a point of origin

to a destination. And the step of revising mathematical relationship is inherent because every point on the raster map contains a different geographic coordinates of points.

20. Claim 20, "the apparatus of claim 19, wherein the means for revising further comprising means for disregarding any points previously identified that are substantially inconsistent with the mathematical relationship", Delorme discloses in (col. 34, lines 21-23) many operations that prompt new grid display/output can be conveniently described in terms of naming the new grid then changing the display/output accordingly.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Javid A Amini whose telephone number is 703-605-4248. The examiner can normally be reached on 8-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi can be reached on 703-305-4713. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-8705 for regular communications and 703-746-8705 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-0377.

Javid Amini
September 22, 2003

MICHAEL RAZAVI
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